* Approved For Release 1999/09/09 : CIA-RDP82-00457R002600120004-0 CLASSIFICATION WHOTE T/GOLITROL 25X1A2g CENTRAL INTELLIGENCE AGENCY REPORT NO. CD NO. DNEIDENTIA COUNTRY USSR DATE DISTR. 31 March 1949 SUBJECT Frezer Cutting Tool Factory i/n M. I. NO. OF PAGES Kalinin, Moscow KEIVIN IN vin --LACE 25X1A6a NO. OF ENCLS. ACQUIRED CATE OF IN SUPPLEMENT TO 25X1X6

- 1. The Frezer Cutting Tool Factory i/n M. I. Kalinin (Moskovski Zavod Rezhushchikh Instrumentov "Frezer" imeni M. I. Kalinina) is located at Karacharovo, near Perovo, on the eastern outskirts of Moscow. The factory is connected with the Karacharovo railway station by its own
- 2. The Frezer Factory is controlled by the Ministry for Machine Tool Construction of the USSR through the Chief Directorate for the Tool Industry.

Description

- 3. Construction of the factory was begun in 1930 and the first part started production in April 1932. At that time equipment consisted of about 600 machine tools and automatic machines, the majority of which were from German firms (Stock, Loewe, and Klingelnberg). The factory was completed
- 4. In mid-1948, work was begun on the mechanization of loading and unloading operations at the factory railway station. Cranes were installed and special trucks were acquired for the loading of finished goods and the unloading of raw materials.
- 5. The total surface area of the factory is one square kilometer. The main factory building is rectangular and measures 250 x 100 meters. The building containing the repair and tool shops covers 4,500 square meters. There are also six smaller industrial buildings, several auxiliary buildings (garage, transformer station, laboratory, stores), and numerous dwellings for personnel.
- 6. Shops include: Drill, milling, tap, die, reamer, machine tool construction, thread tool (rezbovoi instrument), preparing (zagotovitelny), grinding, experimental, thermal, tool assembly, small series, boiler, packing case, transport, and several small auxiliary shops.

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letter of 16 October 1978 from the Director of Central Intelligence

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- Departments include: Chief Engineer's, Planning and Production, Supply, Sales, Finance, Chief Accountant's, Capital Construction, Technical Control, and Chief Dispatcher's Departments.
- 8. <u>Drill shop</u>: Produces drills of very many types and sizes. For the production of drills with a diameter of 1.5 to 15 mm there is a continuous line with an overhead cable car line (podvesnaya transportnaya doroga). This continuous line has considerably increased the output of drills of these sizes and has reduced the quantity of rejected material. It produces monthly about 50 type-sizes (tipo-razmer) of various drills within the above diameter measurements, to the total of several hundred thousand drills. In mid-1948, production of large-diameter drills (80 to 90 mm.) was begun, but output of these drills is small at present. Production of drills with hard alloys (twerdy splay) was begun in 1947 and developed in 1948.
- 9. Tap shop (tsekh metchikov): This shop also has two continuous lines with several belt conveyors for production of two to fourteen mm. diameter taps.
- 10. Die shop (tsekh plashek): Continuous production of round dies was studied and organized for three years, but the continuous line began to operate efficiently only at the end of 1948. Pipe-threading and sleeve-threading (mufto-narezny) dies are produced in medium series (sredneserilay).
- 11. Machine tool construction shop: Makes special machine tools almost exclusively for the requirements of the factory, e.g., several machine tools for the production of large diameter drills, about 20 machine tools for the tap shop continuous line, special machine tools for the production of dies. Only a few special machine tools were sent to affiliated factories for the production of cutting tools (Tomsk Tool Factory, Novosibirsk Tool Factory).
- 12. Thermal shop: A very large shop situated in the middle of the main building. It has large underground accommodation (over 130 meters long) with tenks, pumps, and pipes for annealing (kalilny) liquids. The shop has numerous annealing furnaces for the thermal treatment of tools. In 1947 and 1948, new supplementary equipment was installed for hardening tools with high frequency currents.
- 13. Tool assembling shop (tsekh sbornogo instrumenta): Produces a large number of assembled tools, such as assembled milling cutters and reamers with inserted (stavny) blades.
- 14. Milling cutter shop (tsekh frezerov): Produces milling cutters of numerous types and sizes, including worm milling cutters, milling cutters with hard alloys, welded worm cutters in which teeth of high-speed steel are welded onto a body of ordinary steel, face (tortsevy) milling cutters of special cast iron for speed milling, face milling cutters with inserted blades. Some types of milling cutters are mass-produced and some are produced in medium series.
- 15. Reamer shop (tackh razvertok): Froduces a large number of reamers of various types and sizes, including adjustable reamers and reamers for cutting conical threads.
- 16. <u>Laboratory</u>: Divided into six sections: chemical, metallographic, raw materials research, cutting, measuring, and machine sections.

Production

- 17. The factory has produced cutting tools since its opening in 1932. The chief types of tools produced are drills, taps (metchik), dies (plashka), milling cutters, and reamers (razvěrtka), in quantitative order.
- 18. In 1948, the factory produced about 1,600 type-sizes of various tools.

 The value of output in 1948 was about 70 million rubles.

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COMMISSION

Personnel.

- 19. In December 1948, the total number of personnel was about 5,100. The director in December 1948 was Zhiltsov and the chief engineer was Aleksandrov.
- 20. Three shifts are worked in the main shops.

Raw Materials

- 21. The factory receives about 8,000 tons of high quality steel per annum.

 High-speed steel takes the first place, followed by alloy steels and a small quantity of carbon steel. Steel is received in bars and cylindrical sections (otrezok) of bars. A large quantity of steel is obtained from the Elektrostal Metallurgical Works, in the town of Elektrostal near Moscow, and from the Serp i Molot Works, Moscow. Hard alloys are obtained from the Moscow Hard Alloys Combine.
- 22. In 1948, the factory installed equipment for resmelting filings (struzhok) and small scraps of high-speed steel into metal which can be used again for production.

